18. (New) The method as recited in Claim 8, further comprising:

associating each of the messages being transferred with a unique identifier;

determining an address of a corresponding device from the unique identifier associated with a message;

transferring the message to the address of the corresponding embedded device.

REMARKS

The Examiner objected to the specification stating that the title is not descriptive. The title is now amended to overcome this objection.

Claims 1-18 are pending in the application. Claims 1, 3, 4, and 8 have been amended. No claim has yet been allowed. New claims 15-18 have been added.

Certain amendments were made to the claims for the purpose of clarification. Claim 3 now recites that the queue manager facilitates the transfer of messages between the router and a process by locating and establishing a connection with the router and transferring the messages from the process to the router. Support for this amendment may be found at least in Figure 2B and in the specification on page 15, line 19 through page 17, line 2.

Claim 4 has been amended to depend from claim 2 for proper antecedent basis. Claim 4 has also been amended to clarify that the router retrieves "one or more of the unacknowledged" messages from the message store when the system manager indicates that an embedded device is able to accept messages.

The Office Action rejected all of the claims under 35. U.S.C. §102(b) as being anticipated by U.S. patent 5,854,897 to Radziewicz et al. The present invention provides guaranteed delivery of messages to embedded devices in a data network. According to one embodiment, a message router transfers messages to the embedded devices. The router waits for acknowledgments of the transferred messages from the embedded devices. If an acknowledgment is not received, such as when an embedded device is not active, the unacknowledged messages are kept in an associated message store. The messages are kept in the message store until the corresponding embedded devices can accept messages, such as when the embedded devices are again active.

The Examiner rejected claims 1 and 8 stating that Radziewicz discloses a router that transfers messages to embedded devices in a data network, and a message store that temporarily stores messages addressed to embedded devices until the embedded devices can accept them. Claims 1 and 8 are now amended to include the features of waiting for acknowledgments from the embedded devices and storing unacknowledged messages until the corresponding embedded devices can accept the messages. Support for these claim amendments may be found at least in Figure 2C and in the specification on page 17, line 3 through page 18, line 14.

Radziewicz does not teach or suggest the claimed features of claims 1 and 8 as now amended. In contrast, Radziewicz discloses modifying network software of an Internet Service Provider (ISP), such that announcements and advertising messages are transmitted to a client device through a browser when the connection is idle. There is no teaching or suggestion of waiting for acknowledgments of the messages from the embedded devices and storing unacknowledged messages until the corresponding embedded device can accept the unacknowledged messages. Rather, the messages are merely transmitted once the connection between a client device and ISP is deemed idle. Thus, Radziewicz does not teach or suggest a system or method as now recited in claims 1 and 8. Claims 1 and 8 should be allowed.

Claims 2-7 and 9-14 which depend from claim 1 or 8 are patentable for the same reasons.

New claims 15 and 16 depend from independent claims 1 and 8, respectively, and recite an additional feature, that "the messages are control messages directing the embedded devices to download, install, or activate content." Support for these new claims may be found at least in the specification on page 22, lines 10-16.

In contrast, Radziewicz only transfers announcements and advertising messages to be played or displayed at the client device. Therefore, these claims are allowable for this reason and for the same reasons given above for claims 1 and 8.

New claims 17 and 18 provide network-platform independence for message delivery. Specifically, messages are associated with a globally unique identifier (GUID). The GUID is used by the router to determine a corresponding network address for the destination device. For example, the determined network address may be an IP address or other address formats of various communication protocols that may be implemented by the devices. In this way,

embodiments of the invention may accommodate devices that communicate using various communication protocols on different data networks.

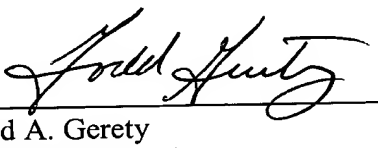
In particular, dependent claims 17 and 18 recite the features of (i) associating each of the messages being transferred with a unique identifier, (ii) determining an address of a corresponding device from the unique identifier associated with a message; and (iii) transferring the message to the address of the corresponding embedded device. Support for these new claims may be found at least in Figure 2C and in the specification on page 17, lines 3 through page 18, line 17. Radziewicz does not teach or suggest such a system or method for providing network-platform independence for message delivery. These claims are therefore allowable for this reason and for the same reasons as claims 1 and 8.

CONCLUSION

In view of the above amendments and remarks, it is believed that claims 1-18 are in condition for allowance, and it is respectfully requested that the application be passed to issue. If the Examiner feels that a telephone conference would expedite prosecution of this case, the Examiner is invited to call the undersigned at (978) 341-0036.

Respectfully submitted,

HAMILTON, BROOK, SMITH & REYNOLDS, P.C.

By 

Todd A. Gerety
Registration No. 51,729
Telephone: (978) 341-0036
Facsimile: (978) 341-0136

Concord, MA 01742-9133
Dated: 6/11/03

MARKED UP VERSION OF AMENDMENTS

Claim Amendments Under 37 C.F.R. § 1.121(c)(1)(ii)

1. (Amended) A message router system for a server system that communicates with embedded devices over a data network, the router system comprising:

a router coupled to a message store;

[a] the router [that transfers] transferring messages to the embedded devices on the data network [when the embedded devices are accepting messages]; [and]

the router waiting for acknowledgments of the messages from the embedded devices; and

the router storing unacknowledged messages addressed to corresponding embedded devices in the [a] message store [that temporarily stores messages addressed to embedded devices] until the corresponding embedded devices can accept the unacknowledged messages.

3. (Amended) A message router system as recited in Claim 2, further comprising a queue manager for facilitating the transfer of messages between the [message] router and a process, such that the queue manager locates and establishes a connection with the router and transfers the messages from the process to the router.

4. (Amended) A message router system as recited in Claim [1] 2, wherein the router retrieves one or more of the unacknowledged messages from the message store when [a] the system manager indicates that an embedded device to which the one or more unacknowledged messages are addressed is able to accept the one or more unacknowledged messages.

8. (Amended) A method for routing messages from a server system to embedded devices over a data network, the method comprising:

transferring messages to the embedded devices over the data network [when the embedded devices are accepting messages]; [and]

waiting for acknowledgments of the messages from the embedded devices; and

storing unacknowledged messages addressed to corresponding embedded devices until the corresponding embedded devices can accept the unacknowledged messages.